

AMENDMENTS TO THE SPECIFICATION

On page 1, lines 2-3 please replace the title with the following:

“COMPOSITIONS AND METHODS FOR TARGETING CANCER CELLS”.

On page 1, lines 5-6, please replace the paragraph with the following paragraph:

This application is a divisional of U.S. Application No. 09/693,658 filed October 19, 2000, currently pending.

On page 12, please replace lines 17-22 with following amended paragraph:

In a preferred embodiment, R¹¹ is a C₁₂ alkyl, branched alkyl, alkenyl or alkynyl; R¹² is C₈H₁₆ alkyl or branched alkyl; n = 1, and R¹³ is an anticancer agent selected from the group consisting of gemcitabine, ara-C, 5-azacytidine, cladribine, ~~fluelarabine~~ fludarabine, fluorodeoxyuridine, cytosine arabinoside, and 6-mercaptopurine, 6-thioguanine, 5-deoxyfluorouridine, florafur, capecitabine, 5-deoxy-5-fluorocytidine, 5-aza-cytosine arabinoside, troxacitabine, and pentostatin, wherein the phosphorus atom of the phosphate moiety is covalently linked in a phosphate ester ~~likage~~ linkage to the oxygen atom of the 5' hydroxyl group of a sugar moiety of R¹³.

On page 13, please replace lines 15-19 with the following amended paragraph:

In a preferred aspect, R²¹ is C₁₂ alkyl; R²² is C₁₀ alkyl; n = 1, and R²³ is an anticancer agent selected from the group consisting of gemcitabine, ara-C, 5-azacytidine, cladribine, ~~fluelarabine~~ fludarabine, fluorodeoxyuridine, cytosine arabinoside, and 6-mercaptopurine, 6-thioguanine, 5-deoxyfluorouridine, florafur, capecitabine, 5-deoxy-5-fluorocytidine, 5-aza-cytosine arabinoside, troxacitabine, and pentostatin, wherein the methylene group of the phosphonate moiety is covalently linked to the oxygen atom of the 5' hydroxyl group of a sugar moiety of R²³.

On page 14, please replace lines 11-15 with the following amended paragraph:

In a preferred embodiment, R³¹ is (C₆–C₁₆) alkyl, branched alkyl, alkenyl or alkynyl; R³² is (C₁–C₈) alkyl, branched alkyl, alkenyl or alkynyl, and R³³ is an anticancer agent selected from the group consisting of mitoxanthrone, doxorubicin, idarubicin, epirubicin, daunorubicin, mitomycin, methotrexate, and CPT-11, SN-38, camptothecin, topotecan, 9-nitrocamptothecin, and 9-aminocamptothecin, and is covalently linked via an ester, amido or carbamate linkage to the –SH, OH or amino group of X³³.

On page 17, please replace lines 4-8 with the following amended paragraph:

Figure 1, comprising Figures 1A, 1B, and 1C ~~and 1D~~ is a series of formulae depicting the chemical structures of several anticancer agents. Figure 1A depicts the chemical structure of ~~BM21-1290~~ gemcitabine. Figure 1B depicts the chemical structure of ~~gemcitabine~~ ara-C. Figure 1C depicts the chemical structure of ~~ara-C~~ 5-azacytidine. ~~Figure 1D depicts the chemical structure of 5-azacytidine.~~

On page 17, please delete lines 16-25.

On page 17, please replace lines 26-27 with the following amended paragraph:

Figure 5 ~~7~~, comprising Figures ~~7A~~ 5A and ~~7B~~ 5B, is a pair of formulae depicting the chemical structures of exemplary compounds of Formula III.

On page 17, please replace lines 28-29 with the following paragraph:

Figure 6 ~~8~~, comprising Figures ~~8A~~ 6A and ~~8B~~ 6B, is a pair of formulae depicting the chemical structures of exemplary compounds of Formula IV.

On page 17, please replace lines 30-31 with the following paragraph:

Figure 9 ~~7~~ is a formula depicting the chemical structure of an exemplary compound of Formula V.

On page 28, please replace lines 28-32 with the following amended paragraph:

Preferably, the anticancer agent is selected from the group consisting of gemcitabine, ara-C, 5-azacytidine, cladribine, ~~fluelarabine~~ fludarabine, fluorodeoxyuridine, cytosine arabinoside ~~and~~ 6-mercaptopurine, 6-thioguanine, 5-deoxyfluorouridine, fltorafur, capecitabine, 5-deoxy-5-fluorocytidine, 5-aza-cytsine arabinoside, troxacitabine, and pentostatin, wherein the phosphorus atom of the phosphate moiety is covalently linked in a phosphate ester ~~likege~~ linkage to the oxygen atom of the 5' hydroxyl group of a sugar moiety of R¹³.

On page 30, please replace lines 3-6 with the following amended paragraph:

Preferably, the anticancer agent is selected from the group consisting of gemcitabine, ara-C, 5-azacytidine, cladribine, ~~fluelarabine~~ fludarabine, fluorodeoxyuridine, cytosine arabinoside ~~and~~ 6-mercaptopurine, 6-thioguanine, 5-deoxyfluorouridine, fltorafur, capecitabine, 5-deoxy-5-fluorocytidine, 5-aza-cytsine arabinoside, troxacitabine, and pentostatin, wherein the methylene group of the phosphonate moiety is covalently linked to the oxygen atom of the 5' hydroxyl group of a sugar moiety of R²³.

On page 31, please replace lines 7-9 with the following amended paragraph:

Preferably, the anticancer agent is selected from the group consisting of mitoxanthrone, doxorubicin, idarubicin, epirubicin, daunorubicin, mitomycin, methotrexate, ~~and~~ CPT-11, SN-38, camptothecin, topotecan, 9-nitrocamptothecin, and 9-aminocamptothecin, and is covalently linked via an ester, amido or carbamate linkage to the –SH, OH or amino group of X³³.

On pages 51-52, please delete Example 4, page 51, line 14 – page 52, line 20.

On page 52, please replace line 22 with the following amended paragraph:

Example 4 5

On page 53, please replace line 1 with the following amended paragraph:

Example 5 6